

STATEMENT OF BASIS
SUNLAND WATER DISTRICT
RECLAIMED WATER PERMIT NO. ST 6003

The purpose of this Statement of Basis is to explain the need to modify the Permit to correct the due date for the Operation and Maintenance Manual, to change the due date of the Residual Solids Management plan, to waive the 0.5 mg/L chlorine residual requirement in the interim limits, and to remove the requirement to measure static water level in three of the five wells.

I. GENERAL INFORMATION

- A. Permittee: Sunland Water District
137 Fairway Drive
Sequim, Washington 98382
- B. Discharge Locations: Spray field
Latitude: 48° 07' 00" N
Longitude: 123° 05' 51" W

II. REQUEST FOR MODIFICATION:

The new Reclaimed Water Permit for the Sunland Water District was issued on November 3, 2003, and became effective on December 1, 2003. Various issues have come to light since the permit was issued. The first issue deals with the Operation and Maintenance Manual. The due date listed in the permit was December 15, 2003, which was just a couple of weeks after the permit became effective. The Department of Ecology (Ecology) had discussed with Sunland prior to issuing the permit that this date should be delayed, but then left the date unchanged in the final permit. Ecology would therefore like to correct this oversight and include a new, more reasonable due date. The new due date for the Operation and Maintenance Manual is May 15, 2005. This makes sense not only to give some time between the permit effective date and the due date, but also with upgrades planned to the reclaimed water plant, a manual due now would be quickly outdated. The May 15, 2005, date corrects these issues.

The second issue is the due date of the Residual Solids Management Plan. The permit listed a due date of April 15, 2004, for the plan that is to provide a plan and schedule for removing biosolids from the old facultative lagoon. Sunland needs to remove these solids and Ecology has just issued Sunland coverage under a general biosolids permit that requires the plan to be submitted by February 26, 2004. Ecology is therefore changing the date in the reclaimed water permit to match the date in the biosolids permit, so both will be consistent in requiring a solids plan by February 26, 2004.

The third issue is the chlorine residual of 0.5 mg/L that is required to be maintained in the reclaimed water distribution system. In permit special Condition S5.B.2, it states that the residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area unless waived in writing by the Departments of Health and Ecology. In permit special Condition S5.B.3, it states that at the discretion of the Departments of Health and Ecology, chlorine residual may not be required on reclaimed water distributed from storage ponds. The reclaimed water plant is presently producing Class D water that is stored in a pond for two to three days and then used for irrigation on a spray field. This irrigation is the only use presently permitted for the

reclaimed water. While the chlorine residual is high going into the storage pond, it is below 0.5 mg/L in the distribution system to the spray field.

The Department of Health and Ecology have decided to waive the chlorine residual requirement for the Class D water that is used on the spray field for the interim permit limit period. This decision was based on the time in the storage pond, and the use of the water. This waiver of the requirement only applies to the Class D water used on the spray field until February 1, 2007. It does not apply to the future production of Class A reclaimed water that may be used elsewhere.

The fourth issue to be modified in the permit is to remove the requirement for measuring static water level for three wells. The permit required static water level to be measured in five wells. Two of the wells, 5N1 and 5N2 are on the Sunland spray field and can be tested. The other three wells are off site, two at houses and one at an orchard, and access to measure the static water level is not possible. These three wells are 6R3, 5N3, and 5P1. For 5P1, the static water level was the only monitoring requirement listed in the permit, so this well was deleted from the permit. For 6R3 (upgradient well) and 5N3 (downgradient well) other quarterly monitoring is required besides the static water level, so only the requirement to measure the static water level was removed. Sunland can still get samples from these wells, so those requirements are still in the permit.

Another issue with the permit is the requirement to sample the secondary effluent, prior to filtration. Sunland has a difficult time collecting a representative sample from this location. They are presently trying to sample both the secondary effluent and the final effluent to collect data that can be compared and evaluated. Based on this evaluation, more changes may need to be made to the permit, but none are included in this modification.

The secondary effluent is required to be sampled because reclaimed water is a stepwise standard. The reclaimed water must achieve secondary treatment standards (30 mg/L BOD and 30 mg/L TSS) at the end of the secondary treatment process, and then the reclaimed water must receive additional treatment, such as filtration. One option if sampling the secondary effluent is too difficult would be to sample the final effluent, but then set the BOD and TSS limits in the final effluent at a lower number (10-15 mg/L) that would demonstrate compliance with secondary standards (30 mg/L) prior to filtration.

A decision on this issue will be made after more data is collected.

This Statement of Basis will serve as an amendment to the Fact Sheet and Permit.